

Alcohol and cigarette use in a pregnant Irish population

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Abstract

One hundred women were selected at random and interviewed. All were postnatal. The object was to establish the level of alcohol and cigarette consumption and the level of knowledge to potential adverse effects. Of the 100 women interviewed, 89% drank prior to pregnancy, six drank between 100-120 grams/week and 19 drank >120 grams/week. 11 women stopped drinking when they became pregnant. In the group which drank 100-120 grams/week, 66% decreased their alcohol consumption considerably ie <100 grams/week while pregnant, while in the group which drank >120 grams/ week only 15% decreased their alcohol consumption. 38 women binged on at least one occasion while 21 said they had binged on at least one occasion during the first trimester. 58% of women were aware of the harmful effects of alcohol during pregnancy. This compared with 93% who were aware of the harmful effects of smoking during pregnancy. Only 11 % of women said a doctor had mentioned alcohol as harmful, while 57% said that a doctor had mentioned the hazard of smoking in pregnancy.

The overall results show a general ignorance to the effects of alcohol consumption in pregnancy compared to the level of knowledge about smoking. The results also highlight the fact that doctors do not make patients aware of the effects of alcohol in pregnancy while they make an effort to educate people about the problems of smoking during pregnancy.

Introduction

The fetal alcohol syndrome (FAS) results from excessive maternal alcohol consumption during pregnancy. However the effects of alcohol on the developing fetus can be regarded as a continuum ranging from growth retardation and/or preterm delivery to the typical syndrome of mental retardation and mal

formations.¹ As these effects are related to the maternal level of alcohol consumption, the level of alcohol and cigarette use in an Irish maternity hospital population was investigated. In addition the level of knowledge about the adverse effects of alcohol and cigarette usage during pregnancy and the source of this information was sought.

Methods

100 postnatal women who had attended the Rotunda Hospital chosen at random were interviewed by one of two doctors (SFD, JK).

A detailed questionnaire was utilized to establish the level of alcohol and cigarette use during the most recent pregnancy, the level of knowledge of possible adverse effects of these two substances and the methods being used by the medical profession to educate pregnant women about the effects of alcohol and cigarette usage in pregnancy.

Alcohol use was defined as (a) mild, if the total amount was less than 100 g/week, (b) moderate, if the total amount was between 100-120 g/week and (c) heavy, if the total amount was greater than 120 g/week. Ten grams of alcohol is equivalent to a half pint of beer, a measure of spirits or a glass of wine. Binge drinking was defined as 60 grams or more of alcohol on a single occasion.

Results

The age of the study group was similar to that of the general patient population attending the Rotunda at that time. There were 6% of our study population under 20 years of age compared to 8.4% of the general population, while 15% were over 35 compared with 13.8% of the general population.

The percentage of nulliparous women in the study group was 41% compared to 34.4% in the general population. There were 7% of grand multiparous women in the study group and 13% in the general population.

There were 26% of the study group who were single at their booking visit, this compares to 22.4% for the general population while the national figure for unmarried mothers during 1989 was 12.6%.

In the moderate (100-120 g/week) alcohol use group, 66% significantly reduced their alcohol consumption, compared with only 15% in the 'heavy' alcohol group who reduced their consumption to the mild level. Of the 11 % of women who gave up alcohol on finding they were pregnant 90% of those came from the 'mild' alcohol group. Regular drinking was reported in 38% while 21% admitted bingeing on at least one occasion during the 1st trimester 52% of women were aware of the harmful effects of alcohol during pregnancy, only 11% had been informed of this by a doctor!

63% of women smoked prior to pregnancy, 5% per stopped smoking while 3% started smoking after becoming pregnant, all these women had previously been smokers.

While the numbers smoking in excess of 20 cigarettes per day did not change, the number of moderate (10/20 day) smokers fell from 48% in the 1st trimester to 28% in the second and 26% in the third trimester. 93% were aware of the harmful effects of cigarettes, 57% had been informed by a doctor of the adverse effects of smoking in pregnancy.

Discussion

Fetal Alcohol Syndrome has an incidence of one in 750 live births in Northern Ireland.¹ There are no figures available for the Republic of Ireland but very few documented cases have been reported, suggesting that the incidence may possibly be lower. The Fetal Alcohol Syndrome is one end of the spectrum of abnormalities which affect a fetus who has been exposed to alcohol during pregnancy. It has been shown that 120 grams of alcohol a week is associated with preterm labour, a reduction in head circumference and a fall in mean body weight.² As little as 100 grams of alcohol weekly has been reported as the level above which fetal harm may result.³

In one study 93% of the population were aware of the harmful effects of cigarette smoking during pregnancy, for example low birth weight,^{4,5} 57% said a doctor had told them that smoking while pregnant is harmful to the fetus. In contrast only 52% of women knew that alcohol caused harm to the fetus and more importantly only 11 % said that a doctor had discussed this with them. Waterson et al⁶ showed that by asking simple 'quantity-frequency' questions coupled with a question about binge drink-

ing whilst taking a clinical history, it is possible to measure alcohol intake accurately. Self reporting of alcohol intake during pregnancy has been shown to be reliable.⁷

In this study we showed that heavy alcohol and heavy cigarette users are the group least likely to reduce their use during pregnancy. Women are more likely to reduce their alcohol intake than their cigarette consumption^{8,9} and consequently it is likely that time spent counselling about the adverse effects of alcohol may be time well spent. Larsson¹⁰ showed that early detection and appropriate counselling can result in lifelong benefits for both mother and child. Importantly the levels of alcohol which are associated with liver damage in women are as low as 30 grams/day and the incidence of alcoholism continues to rise. Rosett et al¹¹ showed that the therapy for heavy drinking during pregnancy could achieve significant reductions in alcohol consumption in 67% of those treated.

It is necessary to educate and convince doctors of the benefits of reducing alcohol intake in pregnancy. Little et al¹² showed that following a two year educational programme on the risks of alcohol use during pregnancy, there was a significant increase in the number of obstetricians asking about current alcohol use in pregnancy and advising patients against excessive alcohol consumption.

The media and medical profession have been more successful in recent years in informing people about the adverse affects of smoking both in general and in pregnancy. The same cannot be said regarding the danger of alcohol. Alcohol remains a part of social life while nicotine use is frowned upon more and more and particularly so among the medical profession.

Many doctors do not regard moderate alcohol use as a problem and do not inform women about the adverse effects of drinking in pregnancy, this is because we are unlikely to preach what we do not practice.

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